



# SOUTH DAKOTA DEPARTMENT OF TRANSPORTATION

Design ~ Construct ~ Maintain

July 26, 2018

## SDDOT Wins Two America's Transportation Awards

The South Dakota DOT has been awarded two regional awards in the 2018 America's Transportation Awards competition. The U.S. 14/6th Street project won in the "Operations Excellence, Small Project" category, and the High Friction Surface Treatment project tied for first in the "Best Use of Technology & Innovation, Small Project" category. The awards were presented at the annual WASHTO conference held in Rapid City in June.



Jeff Senst, Aberdeen Region Engineer, accepts the award for the U.S. 14/6th Street project in Brookings.

View the summary here:

[https://  
americastransportationawards.  
org/south-dakota-dot-u-s-14-  
6th-street-project/](https://americastransportationawards.org/south-dakota-dot-u-s-14-6th-street-project/)



Andy Vandel, Highway Safety Engineer in Project Development, accepts the award for the High Friction Surface Treatment project in western South Dakota.

View the summary here:

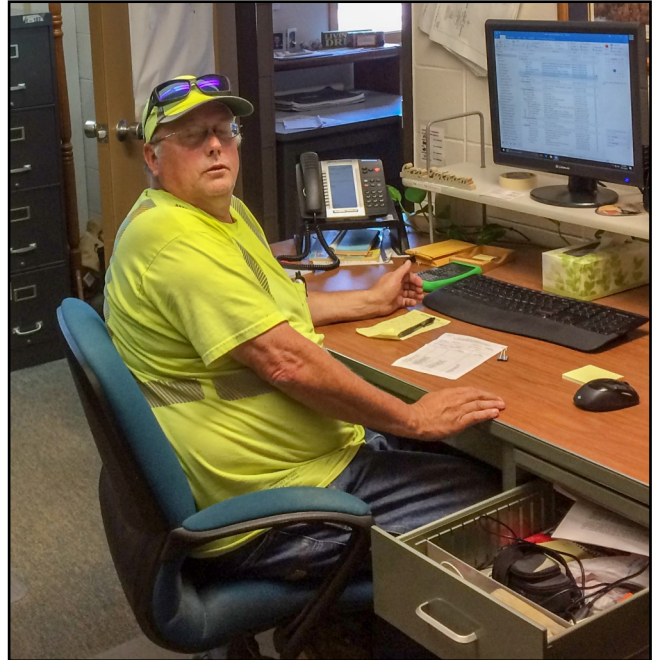
[https://  
americastransportationawards  
.org/south-dakota-department  
-of-transportation-high-friction  
-surface-treatment/](https://americastransportationawards.org/south-dakota-department-of-transportation-high-friction-surface-treatment/)

# The Life and Career of a Yankton Project Engineer

*By Rod Gall and Greg Putnam*

Greg Putnam came to the Yankton DOT in 1989 as a seasonal worker. From the beginning, Greg was always on top of his work and went the extra mile to get things done right. When he was a technician he was never afraid to tackle any type of project and always accepted the challenge. Since Greg was very involved with all of his projects that he was assigned to, he learned how to do all of the tests quickly and made decisions that helped out both the contractors and the DOT. For this dedication and willingness to go further than what was expected, he was rewarded with the position of Project Engineer later on in his career. Greg was always a proactive person instead of a reactive person, preventing problems from happening before they occurred. For this insight, contractors got along with him very well and this foresight also saved the DOT money by eliminating potential problems early in the process. Most technicians and project engineers also know Greg for his years as the head instructor for the required Earthwork class that he taught.

Greg has decided to retire sometime late fall this year so I decided to ask him some questions about his career and things that have changed. Here are his responses:



"I started my career in the DOT in August of 1989 as a summer seasonal after being in the US Army for 7 years. My last tour of duty in the Army was at the National Security Agency working on the Nuclear Attack Assessment Program. I was hired full time in June of 1990 as a Journey Transportation Technician. One of the most memorable project I was on as a technician was the reconstruction of 4<sup>th</sup> Street in Yankton. This project had a 48" Class 5 RC Pipe bored from the Missouri River to the top of the bluff. The pipe was 612' long and was bored at a grade of 11.4288%. When the boring of the pipe was completed the pipe was approx. 0.2' below design grade and 0.4' west of the design location. Another project that was very interesting was the construction of HWY 37 by Running Water. This project was actually designed and constructed under the metric system. The project wasn't that long (2.1244 KM or 1.32 miles) but there was a large amount of unclassified excavation on the project (490,734 Cubic Meters or 641,856 Cubic Yards). So there were some very large cuts and fills on the project and due to the large fills there were 4 cross pipes that were actually backfilled with the imperfect trench method. When we were doing it both the Contractor and I didn't think that using straw as a backfill material above the pipes would work but this project was completed in 1995 and there still isn't any sign of dips above the pipes to this day.

I was promoted to Project Engineer in the beginning of 1999. Since being promoted I have done many interesting projects including major grading projects of SD HWY 11, SD HWY 37 and reconstruction of SD HWY 50 in Yankton which was a 2 year project. But the most memorable project was the construction of the 5.8 million dollar Port of Entry south of Jefferson on Interstate 29. This project had so many different types of construction which included grading, PCC Pavement, 3 buildings, weigh scale, and lighting. The construction of the buildings was very different then construction of roadways. The project had 20 Construction Change Orders totaling \$448,698.35.



The major change that has occurred since I started working with the DOT would be technology. When I started our office had 3 computers which none were really used by the Engineers or Technicians, now everyone has a computer. When documenting project all quantities were written in a field note book and all the tests were done by hand. Now with CMP and MST all the data is typed into the computer which is much faster and easier to share with numerous individuals. Also, surveying has changed a lot when I started we were still doing cross sections with a rod and level and topography was done by measuring all the topo items with a tape from the centerline and documented in a field book which was sent to Pierre to be placed into a drawing file. Now we use GPS or Total Stations and do radial survey which can be done faster and designs can be completed faster.”

Thanks Greg for your time and dedication to the DOT!

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## Mt. Rushmore Road Rapid City - Ribbon Cutting



A ribbon cutting ceremony was held June 6, at Wilson Park to celebrate the end of a nearly four-year construction project on Mount Rushmore Road in Rapid City.

Mount Rushmore Road, also known as the gateway to Mount Rushmore, was originally constructed in 1958, back in the day when U.S. Highway 16 was on Tower Road and traversed down the hillside through what is now Rapid City Medical Center.

The roadway was reconstructed in three sections, largely due to the way storm sewer and sanitary sewer gradelines dictated:

- Work started on the south project in Sept. 2014 and ended on the middle project in May 2018.
  - South project Tower Road to Flormann Street – Reede Construction – Final Cost \$10.36 million
  - North project St. James Street to Kansas City Street – Reede Construction – Final Cost \$7.4 million
  - Middle project Flormann Street to St. James Street – Complete Concrete – Final Cost \$7.12 million

# How to Survive the Number One Fatality Crash in South Dakota

*By Doug Sherman, Winner Area Engineer*

As an Area Engineer for the Department, I see each and every press release that comes out from the Department of Public Safety (DPS) when a fatality occurs on our highways. It deeply saddens me as I read those, especially when after reading enough of them you start seeing a very clear pattern develop. That pattern is what has been described to me on numerous occasions as being the number one fatality crash in South Dakota. Someone for whatever reason has drifted off to the side of the road, then once they realize what has happened they do what instinct tells them to do and over correct the steering wheel. What this does is cause the wheels to turn perpendicular to the ditch inslope and dig into the sod instead of spinning like normal. When the wheels dig in it creates a situation where the bottom end of the vehicle is decelerating at a rate much quicker than the top end of the vehicle. The end result of this is that the momentum of the top end will continue forward while the bottom end is stopping and a rollover occurs.

Time after time after time in reading the press releases we see occasions where when this happens, the driver and or passengers are ejected because no one was wearing seatbelts. The ejections themselves in most cases are what cause the fatality as people are violently hurled in a manner that no human being can survive. What is so sad about this is these types of fatalities are one of the easiest to correct simply by modifying people's behavior, but yet they keep happening over and over again. With that said, I thought I'd take an opportunity this year to help educate others on how to survive this crash.

First off, we need to look at how vehicles are designed. The inside cage of every vehicle manufactured is reinforced in such a manner that a protective roll cage exists. Most of us don't even realize this, but I assure you it is true in most every vehicle we drive. What this roll cage does then is create a pocket of space where if a roll over occurs, the occupant of the vehicle will have room to live in most rollover accidents. Obviously, this is not the case in 100% of every accident, but when you play the percentages, it is the case in a huge majority of them. Hence, the percentages are heavily in your favor in this type of accident if you can find a way to not be ejected from the vehicle and let that roll cage provide to you enough space where you have room to live. The only real way I know of to help ensure a person is not ejected is to have your seat belt on. The seat belt will lock in and hold you in place so you are not ejected and thereby keep in inside the roll cage area where you have a fighting chance to survive the accident.

Secondly, we need to look at what caused the rollover in the first place. Remember what I said about the momentum of the top end of the vehicle travelling at a higher rate of speed than the bottom end of the vehicle after a person has cranked the wheel and turned the tires sideways. The key is to avoid your instinct here if you find you have drifted off the side of the road. Instead, keep your wheels straight. Most inslopes on our highways are designed to allow a vehicle to remain upright if it travels off the road for some reason. The ride won't be fun by any means, but keeping the vehicle upright is huge in surviving this type of crash. Hence, we need to avoid our instinct to over correct and instead force ourselves to keep the wheels straight so we have a fighting chance of keeping the vehicle upright.

Lastly, we need to look at ourselves in the mirror and ask a question. Do I have any bad habits I do when I drive that might cause me to drift off the road unexpectedly and get myself in a bad situation? We need to think about things that distract us. Are we on a cell phone we shouldn't be using? Are we messing with a radio to find a new station? Are we day dreaming about things and not paying attention to the road in front of us? Are we paying attention so that if something unexpected happens like a deer running in front of us we are ready to deal with it?

When you think about it, it's kind of silly that this type of accident which is so preventable is our number one killer. Please take some time to think about what I have noted and help spread the word to anyone who is willing to listen as I truly believe we can correct this and not have to see so many sad press releases anymore.



## I-90 Exit 14 Spearfish - Ribbon Cutting

A ribbon cutting ceremony was held on July 11, 2018, atop the Exit 14 bridge over Interstate 90 at Spearfish. Secretary Darin Bergquist, Belle Fourche Area Engineer Tammy Williams, Dan Hodgs, Spearfish City Council President and David Gustafson, President of Heavy Constructors, Inc. (prime contractor) all spoke to celebrate the occasion.

### I90 Exit 14 Interchange Reconstruction

The existing diamond style interchange was first built in the early 1970's. The only business in the area at that time was the Holiday Inn. Spearfish has grown since then and today is about the future and how this new single point interchange will serve the continued growth of Spearfish. Construction began on March 14, 2016 with a final contract completion date of June 1, 2018.

**Project Cost:** \$27.6 million

### Project Description:

The reconstruction consisted of complete replacement of the existing bridge, along with the realignment of all four ramps, 27th Street and Colorado Boulevard. All new roadway lighting was installed with new traffic signal systems at the bridge, 1st Ave and Colorado.

### Structure Project Facts:

- Bridge is 183' long Bridge is 264' wide (widest bridge in the state)
- 29 prestressed concrete girders/span = 58 girders for a total 5,220 feet of prestressed concrete girders
- 4,065 cu. yds. of concrete used in the deck, abutments, bent caps, piers and approach slabs
- 384,961 lbs. of reinforcing steel used - one of the first bridges to have stainless steel in the bridge deck with a life expectancy of 75 to 100 years.
- 10,148 feet of steel piling in the bridge abutments and bent footings



## What Can I Do For You?

### Lessons Learned from the Field

It started with the Supply Guy (Lieutenant, Supply Officer). I noticed that whenever he spoke to anyone the last words out of his mouth were “what can I do for you?” It didn’t matter if he was speaking to the handful of Officers that outranked him or the other 340 troops below him. He always asked, “what can I do for you?”

Notice that he didn’t phrase the question as ‘how can I help you.’ He worded the question in a form that asked for tasks. In the Navy, we are very good at giving direct tasks for work that must be done. When you have to choose your words wisely because time is too valuable to waste, you focus on being clear and direct and skip all the fluffy stuff that would normally make the message easier to digest.

The implied answer to that question is a no-brainer; make sure my troops have the gear to protect them, the tools and materials to do the work, the food to feed them; keep the toilet paper stocked and honey buckets clean.

What can I do for you? That question was not an opportunity for a single person to do all the work; it was a question asked from a position that took on the responsibility of organizing a team to ensure that these most basic needs were being met. When he agreed to take on those tasks, he knew that he was agreeing to make his troops work to support the war fighter and construction team. His team wasn’t the one swinging the hammers, operating the construction equipment or standing security watch in an earthen hole. But his team worked long hours, counting and recounting each tool kit, each piece of construction material, each tent, canteen, printer and ink (etc.). It was his team that made sure the coffee was hot and the geedunk was plentiful.

Upon further contemplation of that question from the Supply Officer; my answer was simple: Just say yes.

Say yes when my troop needs even the smallest of items, like a chem light, shovel, hand sanitizer, or leather gloves to place c-wire.

Say yes when my troop is at their wits end from getting the run around for a simple request.

Say yes when my troop has been standing security watch in a foxhole all night and just wants a hot cup of coffee and a shower.

Say yes when my troop has been driving equipment for loading/unloading operations since before sunrise and finished at midnight the night before.

At a time when everything is hard; people are tired, hungry and dirty; say yes and watch the weight of one more struggle be lifted off their shoulders. A yes in this context is like a deep sigh of relief that brings a calmness back to our humanity.

Lieutenant Dave Yacht is his name. We joke that the Navy has a lot of ships but only one Yacht. Like me, he is a Mustang Officer. It is a slang term, that by the end of World War II, it was understood across the armed forces that a mustang was an officer with service in the enlisted ranks before commissioning.

It refers to the mustang horse, a feral animal and therefore not a thoroughbred. A mustang, after being captured, can be tamed and saddle broken but it always has a bit of a wild streak, and can periodically revert to its old ways. Since a mustang was formerly a feral and free animal, it may very well be smarter, more capable and have better survival instinct than thoroughbreds.

Like the Navy Seabees and Mustang Officers, the people in the SDDOT come from all aspects of life, bringing with them a unique background, experience, and skill set. This diversity is part of what makes us efficient at taking projects from concept to realization. Your work directly contributes to the mission and success of the team. Take pride and ownership of your work and consider making this question a common place in your office: “what can I do for you?”



If it wasn't for the Supply Guy, my trucks would have been empty and the mission would have failed.

Claire Peschong LT, CEC, USN  
NMCB 25 Alfa Company Commander

On behalf of: SDDOT Innovation Team

Navy Jargon:

FTX – Field Training Exercise

C-wire – Concertina wire

Geedunk – junk food

Honey bucket – porta john





## LONGEVITY

### *August 2018*

Robert Joaquin	20	Eagle Butte
Loren Abernathy	20	Materials & Surfacing
Mark King	35	Operations Support

## BABIES!



Matt (Survey Crew Chief) and Betsy (Senior Secretary in Belle Fourche) Stevens welcomed a baby boy, Jaxon, on May 7, 2018!

Jaxon weighed 7lbs 14 oz. and was 20.5" long.

He joins big sister Alexandria.

## Governor Celebrates SDDOT PEN Award



A celebration of the SDDOT's Performance Excellence Network (PEN) Award was held on Monday, July 16. Pictured are: left—Clint Willard, Superintendent of Schools for Brookings & PEN board member and Brian Lassiter (PEN); center back Joel Jundt, Kellie Beck, Todd Seaman, John Forman, Paul Grizzell, President, Baldrige and EFQM Performance Excellence Consultant and Coach, middle Craig Smith, Greg Fuller, Jeff Senst, Steve Wagner, Baseline Consulting, LLC; front Secretary Darin Bergquist and Gov. Dennis Daugaard.



## Mentoring Corner

### Upcoming Mentoring Events:

Mentoring 2018-19 Program Kickoff – August 30, 2018

Mentoring Registration Period – August 30 to September 21, 2018

Next Extra Mile Mentoring Book Club – Announcement Coming Soon!

### Who Mentored You?

*by June Hansen, Mentoring Program Co-Coordinator*



Have you ever stopped to ask yourself the question, “who mentored you?” It’s really an important question. You wouldn’t be the person you are without the people who helped you along the way. Wouldn’t it be nice to have a MRM (Mentoring Reference Marker) along life’s highway to remind you of the important people in your life who made a difference?

What would your MRMs say about you? When you think about who guided and shaped you, is that person a teacher or coach? Or maybe that person is a parent or family member? Is there that one co-worker or supervisor that changed the course of your career? When you inventory your MRMs what does your analysis tell you? Does it answer the question “Who mentored

you?” Or does it leave you asking more questions about your future and wondering what to do about it?

If you are one of those people who are looking for additional guidance or coaching or just someone who wants to continue to work on professional growth and development, then the formal mentoring program is the place to explore for the next MRM in your life. Whether that’s through being a mentor to someone else or finding a mentoring for yourself, either option provides opportunities to expand your horizons.

The next mentoring program cycle is kicking off at the end of August. It’s time to take the plunge and be a mentor. Everyone has more to offer than they realize. Do it for the people who mentored you.

If you’ve got more questions than answers, then maybe it’s time for you to look for a mentor. The mentoring program is mentee-driven, that means that as the mentee you drive the car. You set the direction for your mentoring relationship and you set your goals and objectives. It’s about what you want to get out of the program.

Watch for an email from Secretary Bergquist to officially launch the 2018-19 Mentoring Program. Make time for Mentoring!

## Employees....Blast From the Past!



Dean and Kelly VanDeWiele recently celebrated their 25th wedding anniversary. Kelly ran across this photo and wanted to share. Left to right are Dawn Schwitzer, Kevin Larson, Noel Clocksin (LGA), Kelly (Bid Letting), Dean (Pierre Area Engineer), Del Poppinga, Matt Brey (Watertown Area Engineer), and Brad Letcher (Huron Area Engineer).



### Second place

GTA Feeds took second place in the men's city league softball tournament. They were defeated by Whitley Central Distributing. In front from left with the trophy is batboy Kody McCollam. Pictured in second row from left are Rod Farley, Jeff Hrabanek, Brad Norrid, Kelly McCollam, Derek Nedved and Brad Schroeder. In back from left are Jayd Bruun, Doug Sherman, Brad Horstman, Darrell Ellis, Steve Peters, Gregg Sherman, Jeff Gustafson and Richard Frazier.

The Team in the photo is mostly SDDOT Winner Area Employees circa 1995 or so. SDDOT Winner Area employees at the time the photo was taken are Jeff Hrabanek, Brad Norrid, Kelly McCollam, Brad Schroeder, Doug Sherman, Brad Horstman, Richard Frazier and Jeff Gustafson.